

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013119**Date Inspected:** 16-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Li Yang and Wu Zhi Cheng	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes	No N/A
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes	No N/A
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes	No N/A
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes	No N/A
		<b>Delayed / Cancelled:</b>	Yes	No N/A
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG Trial Assembly	

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Incident Report for Segment 8AW (Floor Beam)

This Quality Assurance (QA) Inspector wrote an Incident Report for Deformation for Floor Beam and Bottom Panel for Segment 8AW at PP64 at W4 location for more comprehensive details please refer the Incident Report # 04-0120F4\_TL-15\_B278\_04-16-10\_8AW\_Distorted\_Floor Beam\_PP 64\_W4 Dated April 16, 2010. Please refer the pictures attached below for quick reference.

Segment 7AW (Lower Chevron)

This Quality Assurance (QA) Inspector witnessed final tension verification for Lower Chevron (North and South side) at Panel Point (PP) 48 and PP 49 for Segment 7AW. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00320 Dated January 16, 2010.

Bolt sizes used were M22 x 70 RC Set# DHGM220020 and final torque required was 520 N-m.

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Bolt sizes used were M22 x 70 RC Set# DHGM220017 and final torque required was 487 N-m and

Bolt sizes used were M22 x 80 RC Set# DHGM220029 and final torque required was 447 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-675 and Hydraulic Torque wrench was been used with Model No. MP582-2 and Sr. No. PW090331001.

### Segment 7BW (Lower Chevron)

This Quality Assurance (QA) Inspector witnessed final tension verification for Lower Chevron (North and South side) at Panel Point (PP) 50, PP 51 and PP 52 for Segment 7BW. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00320 Dated January 16, 2010.

Bolt sizes used were M22 x 70 RC Set# DHGM220020 and final torque required was 520 N-m.

Bolt sizes used were M22 x 70 RC Set# DHGM220017 and final torque required was 487 N-m and

Bolt sizes used were M22 x 80 RC Set# DHGM220029 and final torque required was 447 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-675 and Hydraulic Torque wrench was been used with Model No. MP582-2 and Sr. No. PW090331001.

### Segment 7AW (Upper Chevron)

This Quality Assurance (QA) Inspector witnessed final tension verification for Upper Chevron (North and South side) at Panel Point (PP) 48 and PP 49 for Segment 7AW. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00320 Dated January 16, 2010.

Bolt sizes used were M22 x 70 RC Set# DHGM220020 and final torque required was 520 N-m.

Bolt sizes used were M22 x 70 RC Set# DHGM220017 and final torque required was 487 N-m and

Manual Torque wrench was been used with Sr. No. XQ2-776.

### Segment 7BW (Upper Chevron)

This Quality Assurance (QA) Inspector witnessed final tension verification for Upper Chevron (North and South side) at Panel Point (PP) 50, PP 51 and PP 52 for Segment 7BW. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00320 Dated January 16, 2010.

Bolt sizes used were M22 x 70 RC Set# DHGM220020 and final torque required was 520 N-m.

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Bolt sizes used were M22 x 70 RC Set# DHGM220017 and final torque required was 487 N-m and

Manual Torque wrench was been used with Sr. No. XQ2-776.

### Segment 7CW

This QA Inspector performed Inspection along with Caltrans QA Mr. Manoj for the following Segment 7CW from Panel Point 53, PP 54 and PP 55 for the following items.

Floor Beam Flatness measurement performed the recorded measurements submitted to Lead as well to the engineer for further action.

### Segment 7DW

This QA Inspector performed Inspection along with Caltrans QA Mr. Manoj for the following Segment 7CW from Panel Point 56, PP 57 and PP 58 for the following items.

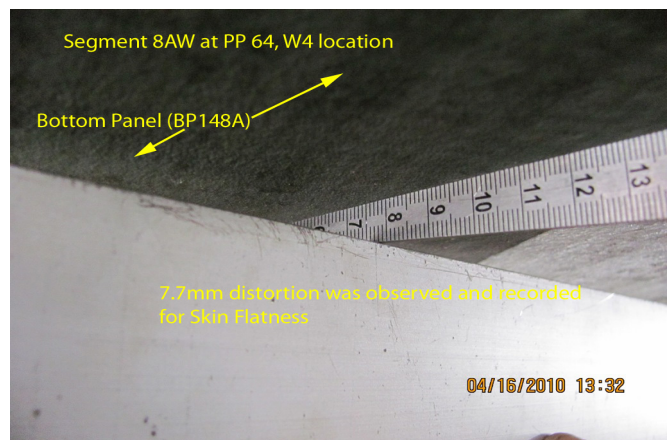
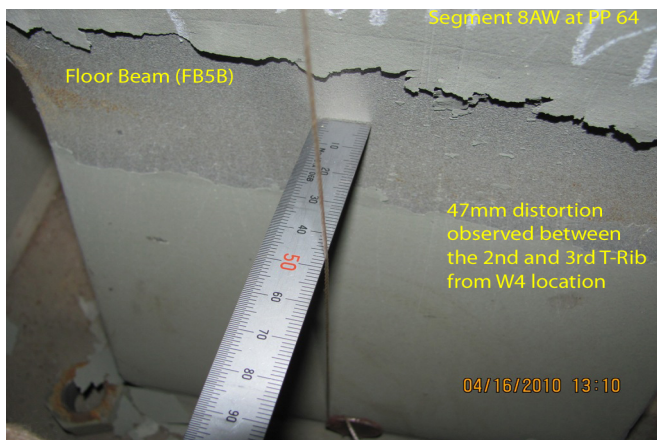
Floor Beam Flatness measurement performed the recorded measurements submitted to Lead as well to the engineer for further action.

### Segment 7EW

This QA Inspector performed Inspection along with Caltrans QA Mr. Manoj for the following Segment 7CW from Panel Point 59 and PP 60 for the following items.

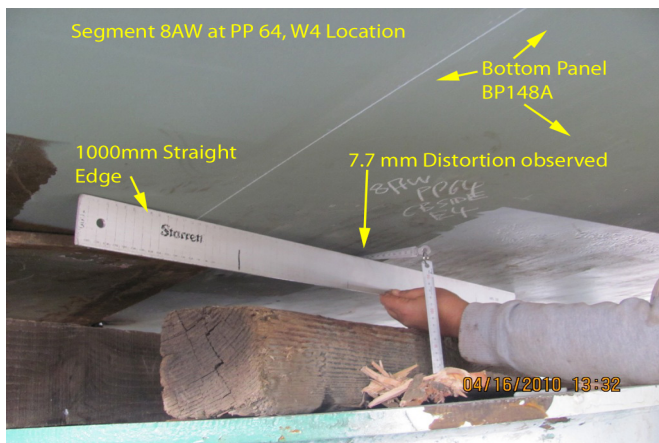
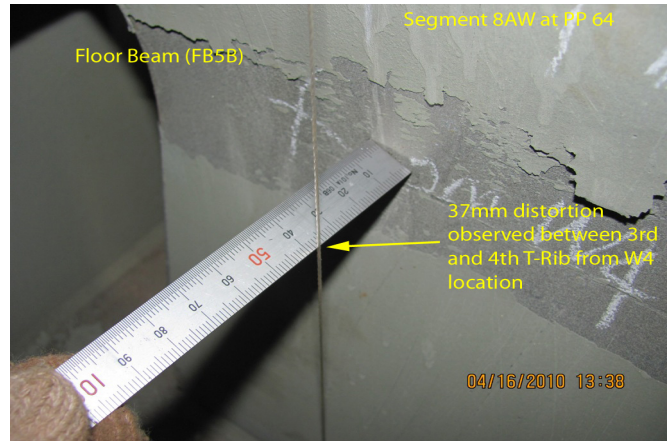
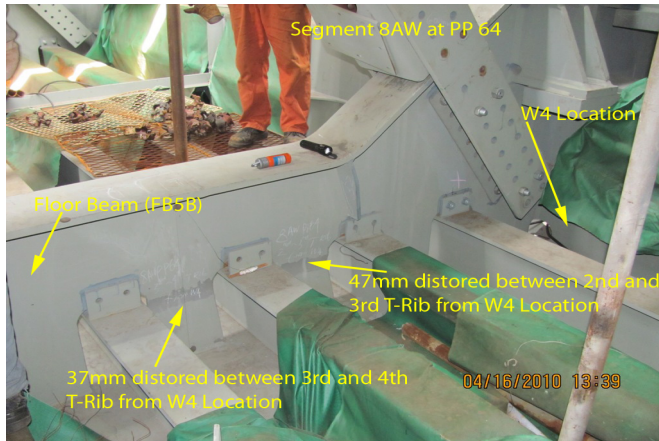
Floor Beam Flatness measurement performed the recorded measurements submitted to Lead as well to the engineer for further action.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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## Summary of Conversations:

No relevant conversations.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

**Inspected By:** Math,Manjunath

Quality Assurance Inspector

**Reviewed By:** Miller,Mark

QA Reviewer